



The Minuteman Repeater Association

A non-profit organization providing communications infrastructure and volunteers for community and emergency events.



The Minuteman

Volume 48, Number 3

January 2019

Membership Meeting Wednesday, 16 January 7:00 PM

Contest University ~ Tim Duffy, K3LR, via Skype

Tim, who is a very well know contester and the owner of multi-multi contest superstation K3LR, will be discussing the following, followed by a Q&A session:

- ♦ What is a contest?
- ♦ What do you need to get started at contesting?
- ♦ Where can you find resources to help you be a contester.
- ♦ What are the benefits of contesting?

This is aimed at hams who are either new at contesting or want to improve their skills.

New England Sci-Tech Inc. 16 Tech Circle Natick MA

Directions to Meeting Location >> page 9

Talk-in: 147.27 pl 146.2

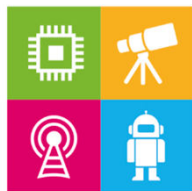
After Tim's presentation, the MMRA will have an election to fill the vacant positions of Clerk.

MMRA Officer Election:

- ♦ KC1JUO Charles Miller – Clerk

Note: We will meet at 5 PM for dinner at 110 Grill, 171 Commonwealth Rd, Wayland, MA. Those who attend will have first chance at a DXEngineering hat.

RSVP: to Dave: daveho@msn.com so we know how big a table to get.



NEW ENGLAND SCI-TECH

New England Sci-Tech Inc is a new 501(c)(3) STEM education center, amateur radio training center, and maker space located at 16 Tech Circle, Natick. It is home to New England Amateur Radio Inc (NE1AR) and the youth radio club Sci-Tech Amateur Radio Society (STARS). NE Sci-Tech welcomes memberships and donations via www.NESciTech.org or www.NE1AR.org.

Table of Contents

MMRA Meetings	1, 9
MMRA Information	2, 8
President's Corner	3
November Membership Meeting	4
December Business Meeting	5
What's Been Happening	6
Treasurer's Report	7
Fleas & Gatherings	9

About the Minuteman Repeater Association

The Minuteman Repeater Association (MMRA) is dedicated to Amateur Radio and public service. The MMRA maintains a large system of repeaters in Eastern Massachusetts.

The MMRA meets (usually) on the 3rd Wednesday of each month from September to June. Meeting times, locations, and talk-in frequency vary and are announced in this newsletter and on weekly nets. Meetings are open to all interested parties. Guest speakers and programs of general interest occur in September, November, January, March, and May. The intervening meetings are also open to all members and are for general business.

The Minuteman newsletter is Emailed one week before each general interest meeting. Members are encouraged to submit articles which can be sent to the editor at newsletter@mmra.org. The deadline for articles is the last Friday of the month preceding the meeting.

Each Tuesday evening at 8PM the MMRA links most of the repeaters for an open net. The topic is "Technical Information and Other Stuff". Join us!

Membership in the MMRA is open to all radio amateurs. Annual dues are \$25 per individual or \$35 per family. See our website for details.

Email to the club leadership should be sent to contact@mmra.org. The MMRA maintains a web site at: <http://www.mmra.org/>

An email distribution list for club members named "MMRA" is at: <http://groups.yahoo.com/>

You can also follow us on twitter @mmraham and like us on Facebook: <https://www.facebook.com/mmraham>.

MMRA QRM Policy

MMRA members and all other operators are strongly encouraged to report repeater activity that does not abide by Part 97 rules or accepted amateur radio practice to the board of directors at contact@mmra.org or via other means.

The most effective way (and probably the only effective way) to deal with an individual causing QRM is to NOT engage that individual on the air. Please include the time and date of any incident. Measures are being taken to make audio recordings of repeater activity.

Repeater and Frequency Information

Band	XMTR Location	Freq	PL	Call	Linking	
					To Hub 1	To Hub 2
MMRA Voice Repeaters						
10m	Marlboro East	29.680	131.8	W1MRA	PTL	PTL
6m	Marlboro East	53.810	71.9	W1BRI	PTL	PTL
Rmt receive Marlboro West: PL=100						
2m	Brookline	145.160	na	K1MRA	D-Star	
	Belmont	145.430	146.2	KC1CLA	PTL	FTL: DARI
	Mendon	146.610		K1KWP	FTL	PTL
	Quincy	146.670		W1BRI	PTL	PTL
	North Reading	146.715		KC1US	PTL	PTL
	Weston	146.790		N1BE	PTL	PTL
	Boston	146.820		K1BOS	FTL	PTL
	Remote receive in Brookline Boston: PL = 127.3					
Marlborough	147.270	146.2	W1MRA	PTL	PTL	
1½m	Hopkinton	223.940	103.5	KB1LOY	PTL	FTL
	Quincy	224.400		N1KUG	PTL	FTL
	Weston	224.700		N1NOM	PTL	FTL
	Marlborough	224.880		W1MRA	PTL	FTL
70cm	Lowell	442.250	88.5	K1LVF	FTL	PTL: 446.775
	Weston *	442.700		KG1H	Network Hub 2 (PTL to Hub 1)	
	North Reading	446.775		W1DYJ	FTL	PTL
	Marlborough	448.225	na	W1MRA	D-Star	
	Marlborough	449.575	W1BRI	PTL	PTL	
	Marlborough *	449.925		W1MRA	Network Hub 1	
33cm	Boston *	927.0625	D244	K1RJZ	PTL	PTL
	Marlborough *	927.700		W1MRA	PTL	PTL
PL out = 131.8						
Marlborough		144.390	none	W1MRA	APRS Digipeater	
???		145.630	146.2	W1MRA	Fox Box	
*Internet	HUB1- 449.925: IRLP node 4133 / Echolink node 4133					
	HUB2 - 442.700: IRLP node 4136 / Echolink node 4136 Connected to 220 Reflector 9124 on Tuesdays					
	927.0625: IRLP 4977			Normally linked to the NE900 Reflector, 9125. Linked to MMRA via IRLP for the TIAOS net. Normally linked		
	927.700: IRLP 4978					

Notes: FTL = Full Time Linked (or default state) PTL = Part Time Linked (on schedule or demand)

President's Corner ~ David Hornbaker , N1DCH

Happy New Year to all members of MMRA!

I am David Hornbaker, N1DCH. I am excited to serve as the newly elected MMRA President. Here's a short biography so that you may know a little about me.

I have been a member of MMRA since December 2017, at which time I passed the Technician and General licenses exams. I passed the Amateur Extra license in March 2018. I have been a member of ARRL since January 2018. I began serving as a Volunteer Examiner for ARRL/VEC since May 2018.

My interest in radio began when I was a kid and hung around the shack of my uncle Myron Hornbaker, W0GFU (SK), Fowler, Kansas. I got my First Class Radiotelephone License in 1975 (now, General Radiotelephone Operator License). I was employed by a local telephone company as an installer of IMTS telephones in automobiles. Later, I went to work for Wichita, Kansas television station KAKE-TV as a master control operator.

While attending undergraduate classes at University Colorado Denver, I was recruited to join Pr1me Computer, Inc. headquartered in Natick, MA. I was a software engineer for eight years in its Research and Development division, where I worked on compilers and the Primos Operating System. Following Pr1me, I was employed by Pacer Software, which sold a portable AppleTalk stack. I ported the stack to OS/2 for 3-Com and Microsoft. Eventually, I was employed by the Microsoft Corporation for 21 years as an Infrastructure Consultant. Today, I own and am President of DCH Consulting Services. I am a graduate of University Massachusetts Lowell, BS Information Technology and currently enrolled in the Masters Degree program.

I look forward to meeting you "on air" (TIOS Net, every Tuesday at 8pm) and in person at our membership meetings. Times and places for our membership meetings are published in this newsletter and on our MMRA website www.MMRA.org

See you soon! N1DCH

The Amateur's Code

The Radio Amateur is:

CONSIDERATE...never knowingly operates in such a way as to lessen the pleasure of others.

LOYAL...offers loyalty, encouragement and support to other amateurs, local clubs, and the American Radio Relay League, through which Amateur Radio in the United States is represented nationally and internationally.

PROGRESSIVE...with knowledge abreast of science, a well-built and efficient station and operation above reproach.

FRIENDLY...slow and patient operating when requested; friendly advice and counsel to the beginner; kindly assistance, cooperation and consideration for the interests of others. These are the hallmarks of the amateur spirit.

BALANCED...radio is an avocation, never interfering with duties owed to family, job, school or community.

PATRIOTIC...station and skill always ready for service to country and community.

Paul M. Segal, W9EEA, 1928

November Membership Meeting Minutes

Charles Miller, KC1JUO, Clerk (acting)

Meeting Open @ 19:35

A quorum of 17 members was present.

Dave Hornbaker (N1DCH) was elected as our New President. [Kevin, K1KWP and Kevin, KC1JYC / first and second] The position of Secretary is now OPEN.

Charles Miller, KC1JUO, volunteered for and was nominated as the MMRA Clerk. (Election to be at the next membership meeting in January)

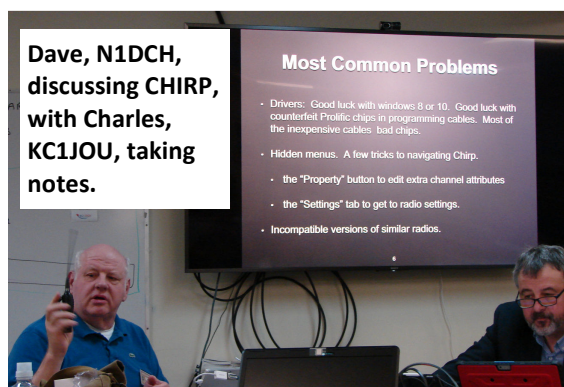
New Business:

- ◆ Board Meeting - December 19th @ Marlborough Library - Story Room 19:00 - 20:30
- ◆ January 16th : Membership Meeting [Location TBD]
- ◆ Looking into Remote Meeting access
- ◆ Relocation of Brookline Repeater If needed: Weston: possible location
- ◆ Bryan, W1BRI, announced that he is stepping down as Technical Director, and that Bob, K1IW, has agreed to be the New Technical Director. This was referred to the board for approval.
- ◆ Membership ~40% renewals

The meeting was adjourned at ~20:15

Following the meeting, Dave, N1DCH, talked about CHIRP. Bryan, W1BRI, brought the service monitor, power meter, dummy load and assorted RF cables and adapters for HT testing.

Note: Dave has uploaded CHIRP import files to the files section of groups.yahoo.com/mmra



December Business Meeting ~ Minutes

Charles Miller, KC1JUO, Clerk (acting)

Meeting Called to Order @ 19:12

Attendance:

Bob (K1IW) – Director, Technical Officer
 Dick (K1KMN)
 Kevin (K1KWP) – Treasurer, Trustee
 Charles (KC1JUO) – Acting Clerk
 Dave (N1DCH) – President, Secretary
 Clark (N1NVK) – Director
 Bryan (W1BRI) – Trustee
 Larry (W1DYJ) – Net Manager, Trustee, Newsletter Editor
 John (WA1MDD) – Vice President

Control Operator Training:

- ♦ Suggestion that we hold control operator training. Good for bringing repeaters up & own. Scheduling possible next year, including technical training. [Attendance is not mandatory but high encouraged]
- ♦ Trustees need to be control operators of their own repeater and all others

Executive Discussion:

Repeater Use Policy: we don't have a current written policy covering profanity. Larry, W1DYJ, will write proposed policy for discussion.

Updated System:

Brookline and Marlborough D-Star gateway was replaced by Bob (K1IW): **Moved** (Dave, N1DCH), **Seconded** (Kevin, K1KWP) and **voted** that Bob (K1IW) be reimbursed for Marlborough \$75.91 - will forward receipt to Kevin (K1KWP)

Treasure Report: Kevin (K1KWP):

- ♦ Kilowatt Hours on various repeaters discussed / some stations have noticeably lower usage
- ♦ Mendon repeater update discussed - will be discussed further in 2019 if opportunity presents itself
- ♦ Interesting proposed experiment : Usage/Power - Before and After Repeaters have been linked
- ♦ Member dues reminder / Grace period reminder
- ♦ Suggestion: Expiring Memberships - Give 30-day notice with reminders

Membership Forms:

Modify paper membership form to update with year membership with new members / first time member licensed

Motion: Honor membership of new members who have taken test with other clubs

Voted: *Current Policy extended to persons who present a CSCE during first year of license*

Newsletter:

- ♦ Newsletter articles being accepted for January Newsletter
- ♦ Possible presentation topic: Hotspot acts as mini-Repeater / Digital-Hotspots

Membership Meetings:

- ♦ At NESci-Tech: Skype presentation: Contest University with K3LR
- ♦ February Business Meeting: Conference Call
- ♦ March: Talk in Burlington

Brookline repeater site:

Concern over need to replacing system in Brookline: Does not seem to be an issue (Bob, K1IW)

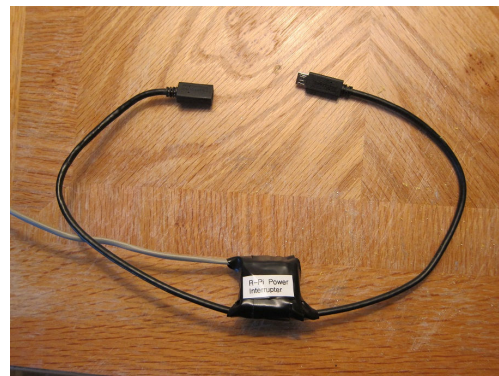
Old Business/Operations:

2018 Annual Report filed 12/28/2018

Meeting Adjourned @ 20:21

Quincy Repeater Improvement

The Quincy site is one of the harder sites to access. On 1 December **Bob, K1IW**, installed a Raspberry Pi power interrupter. If the Pi gets hung again, it can be reset with an RF command code, saving a visit.



What's Been Happening ~ Kevin Paetzold, K1KWP

The President

Earlier this fall the **KG1H** (David Wolfe) announced that he was going to relocate away from New England and would no longer be able to serve as president of the MMRA. On behalf of the MMRA board and the membership I would like to thank **KG1H** for his efforts and leadership of the MMRA for the previous several years.

Shortly after Dave's announcement **N1DCH** (David Hornbaker) was nominated for President. At the November 28 general membership meeting **N1DCH** was elected to be the president. On behalf of the MMRA board and the membership I would like to thank **N1DCH** for stepping up to serve as President.

The Secretary

N1DCH was already serving as the elected Secretary of the MMRA and will continue to do so as the bylaws allow for someone to serve in two offices. *However it would be appropriate for another individual who would like to be more involved with the operation of the MMRA to be nominated (or volunteer) for this position.* The primary duty of the Secretary is to process membership applications and renewals as well as keeping the MMRA database up to date. Although the newsletter is produced by its editor **W1DYJ** the newsletter is actually published by the Secretary. If you are willing or interested in this position please make your intent known to one (or all) of the board members.

The Public Service Coordinator

KG1H also served as the "public service coordinator" for the MMRA. This position is intended to be the main contact point for anyone or any organization requesting use of the MMRA repeaters for public service events as well as the coordinator of public service activities within the MMRA. *If you are willing or interested in this position please make your intent known to one (or all) of the board members.*

The Clerk

At the November 28 general membership meeting **KC1JUO** (Charles Miller) was nominated for the office of Clerk and has been named the acting clerk. There

will be an election vote at the January 16 general membership meeting to confirm **KC1JUO** as the clerk. On behalf of the MMRA board and the membership I would like to thank **KC1JUO** for volunteering to serve as clerk.

The Technical Officer

W1BRI (Bryan Cerqua) has served as the Technical Officer (aka. The Technical Director) for many years (actually more than one decade). Although Bryan still intends to be very involved with the technical side of the MMRA repeater system he requested to step down as the official Technical Officer.

On behalf of the MMRA board and the membership I would like to thank **W1BRI** for all of his many years of service and countless hours working on and keeping the system running, often by himself in a cold unheated radio shelter.

W1BRI recommended **K1IW** (Bob Demattia) as the new technical officer. I can not think of a better candidate for this position. We should all be aware of the immense amount of effort that Bob has put into the technical side of the MMRA for many years (also more than one decade) as well as all his years of service as a past President (and Secretary and website manager and controller programmer and) of the MMRA. In a vote of the board in December **K1IW** was confirmed as the new technical officer of the MMRA. On behalf of the MMRA board and the membership I would like to thank Bob for all of his countless years of service to the MMRA.

Emeritus Positions

The MMRA systems and the organization in general benefited greatly for immense efforts by both **K1IW** and **W1BRI** over many years. The repeater system is much larger, capable, reliable, and flexible as result of their immense efforts over a very long period of time.

In recognition of their large impact over so many years the board voted in December to name **K1IW** as the honorary **President Emeritus** and **W1BRI** as the honorary **Technical Officer Emeritus**.

Treasurer's Report ~ Kevin Paetzold, K1KWP

Recent Donations

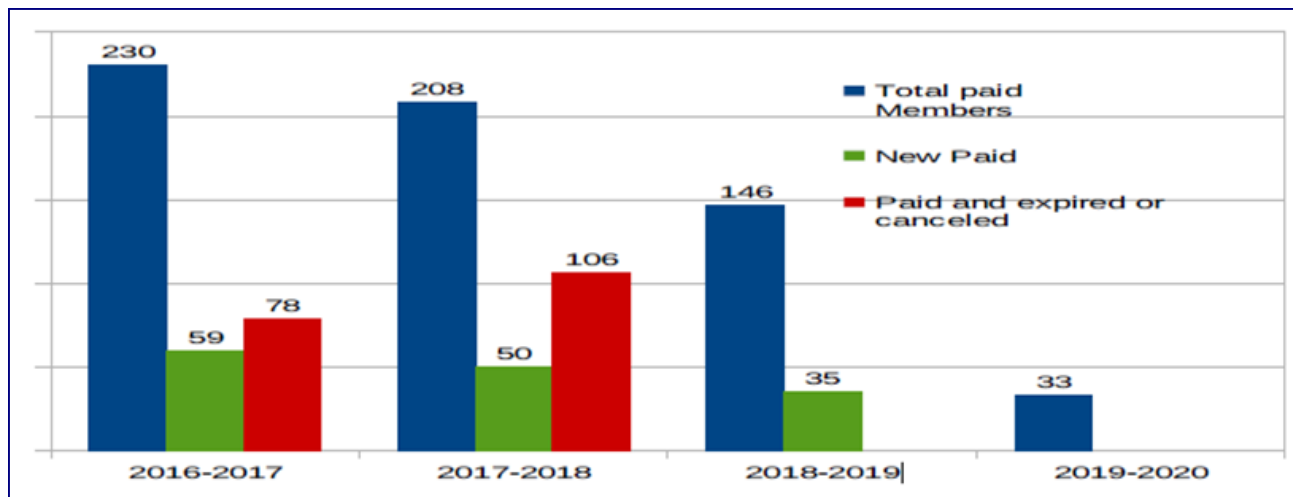
In the previous newsletter we listed donations for the last couple years that we really did not sufficiently acknowledge. To continue that acknowledgment on behalf of the MMRA board and the MMRA membership we would like to thank the individuals below for their recent donations (since the list published in the September newsletter).

W1MVP N1ZYY N1FLO AA1VS KC1IEK W1RLO

Membership Report/Renewals

The MMRA membership year runs from September 1 until August 31 of each year. There is a grace period for those who have not renewed from September 1 until January 1.

The chart below shows that there were 35 new members since January 1 2018. The chart below shows that although 146 people have renewed (or joined) for the current membership year (which started on September 1, 2018) potentially 97 existing members have not yet renewed. 33 members have already renewed for the 2019-2020 membership year. Membership dues are by far the primary income source for the MMRA and your continued membership and dues are needed and appreciated.



New members

On behalf of the MMRA board and the MMRA membership we would like to acknowledge the individuals below who joined the MMRA since January 1, 2018.

AB1RW	K1CCS	K1NDG	KA1GDQ	KA1MAT	KA1OLA	KB1ENV
KB1HDG	KB1MBG	KC1HHK	KC1HNG	KC1IHN	KC1ITW	KC1ITY
KC1IXJ	KC1IXK	KC1IXL	KC1IXM	KC1JKU	KC1JRN	KC1JRO
KC1JRP	KC1JRR	KC1JXH	KC1JXJ	KC1JXL	KC1JYJ	KC1KAE
KC1KHV	KC1SDL	KC1USA	KF6NVR	KF6NVR	N1UUQ	W1IPI

Upcoming MMRA Meetings

Note: Meeting locations and times are subject to change.
Consult the MMRA website for the most up-to-date information.
Teleconference numbers will be available one week before a meeting—if you wish to attend, email contact@mmra.org.

Sunday, 9 Sept ~ Boxboro! 2018 Noon

Wednesday, 19 September ~ Membership Meeting
Topic: Discovering Ham Radio through Makerspace
Location: New England Sci-Tech Inc., Natick

Wednesday, 17 October ~ Business Meeting
Location: Lancaster

Wednesday, 28 November ~ Membership Meeting
Speaker/Topic: CHIRP / HT Workshop
Location: New England Sci-Tech Inc., Natick

Wednesday, 19 December ~ Business Meeting
Location: Marlboro Library

Wednesday, 16 January ~ Membership Meeting
Speaker/Topic: Tim Duffey, K3LR, Contest University (via Skype)
Location: New England Sci-Tech Inc., Natick

Wednesday, 20 February ~ Business Meeting
Location: Teleconference

Wednesday, 20 Mar ~ Membership Meeting
Speaker: Larry Banks, W1DYJ
Topic: FT8: Not a Prefix, a Very Powerful Mode
Location: Microsoft, Burlington

Wednesday, 17 April ~ Business Meeting
Location: tbd + Teleconference

Wednesday, 15 May ~ Annual Meeting
Speaker/Topic: tbd
Location: Weston

Wednesday, 19 June ~ Business Meeting
Location: tbd + Teleconference

Don't Forget! Join Us.

Every Tuesday @ 8 PM
Technical, Informational and Other Stuff Net

The MMRA's repeaters are linked Tuesday nights for the TIOS Net. Keep up with what's happening in the MMRA and ask your ham related questions.

Net Control Operators:

Week 1	W1DYJ	Larry Banks
Week 2	WA1JIM	Jimmy Devaire
Week 3	KC1CLA	Ed Curley
Week 4	K1KWP	Kevin Paetzold
Week 5	KB1OQA	Tom Turner

To connect using Echolink / IRLP during the Net:

- Echolink Conference *NEW-ENG2*
- IRLP node 4133

Previous issues of the MMRA Newsletter are available at:
www.mmra.org → [Newsletter Archive](#) (on the left)

MMRA Leaders

Executive Board — Officers

President	David Hornbaker	N1DCH
Vice President	John Spencer	WA1MDD
Secretary	David Hornbaker	N1DCH
Treasurer	Kevin Paetzold	K1KWP
Clerk (acting)	Charles Miller	KC1JUO

Executive Board — Directors

Director »2019	Bob DeMattia	K1IW
Director »2019	Roger Coulson	WA1NVC
Director »2020	Clark Conti	N1NVK
Director »2020	James Lee	N1DDK

Technical Officer

Technical Officer	Bob DeMattia	K1IW
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President Emeritus

Bob DeMattia	K1IW
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Technical Officer Emeritus

Bryan Cerqua	W1BRI
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Repeater Trustees

* Belmont 145.430	Ed Curley	KC1CLA
* Boston 146.820	John Mullaney	K1BOS
* Brookline Rcv 146.82	Bob Phinney	K5TEC
* Boston 927.0625	Rick Zach	K1RJZ
* Hopkinton 223.940	James Cahill	KB1LOY
* Hopkinton 449.575	Bryan Cerqua	W1BRI
* Lowell 442.250	Vince De La Flor	K1LVF
* Marlborough 53.810, Quincy 146.670;	Bryan Cerqua	W1BRI
* Marlborough: 29.68, 144.390, 147.270, 224.880, 448.225, 449.925, 927.700 — all as W1MRA	Bill Northup	N1QPR
* Mendon 146.610	Kevin Paetzold	K1KWP
* N. Reading 146.715	Bruce Pigott	KC1US
* N. Reading 446.775	Larry Banks	W1DYJ
* Quincy 224.400	Bill Dunn	N1KUG
* Weston 146.790	Bob Evans	N1BE
* Weston 224.700	Eddie Mulhern	N1NOM
* Weston 442.700	David Wolfe	KG1H

Additional, non-Voting

* Newsletter Editor	Larry Banks	W1DYJ
* Emerg. Coord.	Kevin Paetzold	K1KWP
* Pub. Serv. Coord.	open	
* VEC Liaison	Bill Wade	K1IJ
* Net Manager	Larry Banks	W1DYJ
* Web Page Editor	Bob DeMattia	K1IW

* Appointed

MMRA VE Sessions

Check here for the schedule:

<http://www.mmra.org/exam.html>

Contact: Bill Wade, K1IJ 617-699-3670
Evenings 6 - 10 PM Weekends 8 AM to 10 PM.

Membership Meeting Wednesday, 16 January 7:00 PM
Contest University ~ Tim Duffy, K3LR, via Skype

New England Sci-Tech Inc.
16 Tech Circle Natick MA

Calendar of Ham Radio Flea Markets & Gatherings

For more information: <http://mit.edu/w1gsl/Public/ne-fleas>

19 Jan Whitman MA WARC @KoC
16 Feb Marlboro MA AARC @MidSch
23 Feb S Burlington VT RAoNV @HI
3 Mar Nashua NH NEARC/NEVEC
9 Mar Chicopee MA MtTomARA
 @Castle
24 Mar Southington CT SARA
29,30 Mar Lewiston ME AARC ME
7 Apr Framingham MA FARA

28 Apr Thompson CT ECARA
3-4 May Deerfield NH NEARfest XXV
12 May E Greenbush NY EGARA FireCo
18 May Brookline NH NEARC
2 Jun Queens, NY HOSARC @HOS
25 Aug Newtown CT CARA @TownHall
28 Sep Brookline NH NEARC
11,12 Oct Deerfield NH NEARfest XXVI

Area radio clubs are invited to join us for **Winter Field Day in Natick**. Open to the public Saturday, January 26, 2019, from 2-10 pm. Pot Luck Dinner, Ham Radio Event, Yard Sale, Maker Activities, Planetarium Shows, Guest Speaker, Movie Night, all in one event! Hosted by the youth members of Sci-Tech Amateur Radio Society (STARS) and by New England Amateur Radio (NEAR). Held at New England Sci-Tech, 16 Tech Circle, Natick, MA. (See below.)

See website for a list of the major items in the yard sale.

Directions to New England Sci-Tech Inc.
16 Tech Circle Natick MA 01760

From the north: take Rt 95 or Rt 27 or Rt 495 south to Route 30 toward Wayland. Once in Wayland, turn South on Oak Street and in 1/2 mile look for Tech Circle on your left. Follow Tech Circle to the end.

From the south: take Rt 95 or Rt 27 or Rt 495 north to Route 9 toward Natick. At the Wellesley-Natick line, turn North on Oak Street and in 1/2 mile look for Tech Circle on your right. Follow Tech Circle to the end.

From the east or west: follow either Rt 30 or Rt 9 toward Natick, turn onto Oak Street at a set of traffic lights, and in 1/2 mile look for Tech Circle. Follow Tech Circle to the end.

